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PORT OF LIVERPOOL

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

TO THE

PORT HEALTH AUTHORITY

FOR THE YEAR

1954.

C. TINLING & CO., LTD., Printers, 53 Victoria Street, Liverpool

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PORT HEALTH AUTHORITY

OF

LIVERPOOL.

REPORT FOR THE YEAR 1954

BY THE

MEDICAL OFFICER OF HEALTH.

This is the 82nd Annual Report on the work of the Liverpool Port Health Authority.

Circular 33/52 of the Ministry of Health, dated 6th November, 1952, requests that "The Medical Officer of Health shall prepare his Annual Report for 1952 on the lines indicated in Form Port 20".

Form Port 20 reads as follows:—

PORT HEALTH AND RIPARIAN AUTHORITIES.

ANNUAL REPORTS OF MEDICAL OFFICERS OF HEALTH.

(1) Article 17 (5) of the Sanitary Officers (Outside London) Regulations, 1935, provides that a Medical Officer of Health shall, as soon as practicable after the 31st day of December in each year, make an Annual Report to the Authority up to the end of December on the sanitary circumstances, the sanitary administration, and the vital statistics of the

district, containing, in addition to any such matters upon which he may consider it desirable to report, such information as may from time to time be required by the Minister.

(2) Article 27 (18) of the Regulations provides that the Sanitary Inspector shall, as soon as practicable after the 31st day of December in each year, furnish the Medical Officer of Health with a tabular statement containing the following particulars:—

(*a*) The number and nature of inspections made by him during the year;

(*b*) The number of notices served during the year, distinguishing statutory from informal notices;

(*c*) The result of the service of such notices.

(3) The Records of the Authority should accordingly be kept in such form as to enable their Medical Officer of Health to prepare his Report without delay at the close of each year. The report should be in the form and sequence indicated herein—the lettering of the tables being adhered to.

(4) The Medical Officer of Health should include in his Report any comments which he may think desirable

(1) under the headings shown; and

(2) on the need for any development which he considers necessary for efficient administration.

The above-mentioned directions have been followed in so far as the information asked for is available.

Section II. Table B. AMOUNT OF SHIPPING ENTERING THE PORT DURING THE YEAR 1954.

Class of Vessels	Number	Tonnage	Number Inspected		Number reported to be defective	Number of vessels on which defects were remedied	Number of Vessels reported as having, or having had, during the voyage, infectious disease on board
			By the Medical Officer	By the Sanitary Inspector			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Sailing Foreign—							
Steamers	6,028	11,962,499	767	2,883	372	344	146
Motor				2,367	165	159	
Sailing				—	—	—	
Fishing	—	—	—	—	—	—	
Total Foreign...	6,028	11,962,499	767	5,250	537	503	146
Sailing Coastwise—							
Steamers	6,729	3,801,603	1	256	11	9	18
Motor			—	136	—	—	
Sailing			—	—	—	—	
Fishing	—	—	—	—	—	—	
Total Coastwise	6,729	3,801,603	1	392	11	9	18
Total Foreign and Coastwise	12,757	15,764,102	768	5,642	548	512	164

Figures in columns 1 and 2 supplied by H.M. Collector of Customs for this Port.

Section III.

Character of Trade of Port.

The Port of Liverpool trades with all parts of the world, and almost every conceivable kind of cargo is carried by ships arriving in the Mersey.

Table C.

Passenger Traffic during 1954.

No. of Passengers ...	1st Class.	2nd Class.	3rd Class.	Tourist Class.	Transmigrants.
Inwards	24,904	2,604	2,222	29,698	59,428
Outwards	29,482	2,856	2,346	39,264	73,948

Section IV. Inland Barge Traffic.

The number of inland barges plying in and about the Port of Liverpool is approximately 400 with an estimated tonnage of 70,000 tons.

CANAL BOATS (Public Health Act, 1936, Part X).

A port health inspector is engaged periodically on the inspection of canal boats plying in the river or docks.

No. of boats inspected	229
No. of boats with contraventions	18
No. of contraventions	33
No. of contraventions remedied	23
No. of boats inspected for registration	2

Section V. WATER SUPPLY.

(1) Source of supply.

(*a*) The Port.

Liverpool Corporation supplies water for the east side and Birkenhead and Wallasey Corporations and the West Cheshire Water Board for the west side of the River Mersey.

(*b*) SHIPPING.

Vessels in dock are supplied from shore hydrants which are situated at almost every berth throughout the port.

(*c*) AIRPORT.

Water is supplied by Liverpool Corporation. Aircraft are supplied from taps at the airport.

(2) Report on tests for contamination.

A constant check is kept on the cleanliness and condition of ships' drinking-water tanks. If there is any suspicion of contamination the inspector takes samples of the water for bacteriological examination. The Ministry of Transport is informed of samples submitted, the result of examination and of any action taken.

During the year, 98 samples of water were taken, and of these, 34 were found to be unsatisfactory.

(3) Precautions taken against contamination of hydrants and hosepipes.

Officials of the water department are stationed in each dock area. Hoses for supplying water to the ship from shore hydrants may be supplied by the ship, but are usually supplied by the water department. Precautions are taken that the hose used does not come into contact with dock water, and water is run through the hose before actual filling is commenced.

(4) Number and sanitary condition of water boats.

There are no water boats in the port, but tenders or tug boats are occasionally used to supply ships lying in the river. The Mersey Docks and Harbour Board have used Hopper No. 37 to supply fresh water to dredgers operating in the port area. During the year, nine samples of fresh water were taken from the water tanks of Hopper No. 37 and in each case the water was found to be satisfactory. Two samples of water were also taken from the tender "Flying Breeze" and these too were satisfactory.

Section VI. PUBLIC HEALTH (SHIPS) REGULATIONS, 1952.

List of Infected Areas. Copies of the list of infected areas, drawn up from time to time from information supplied by the Minister, have been issued to pilots and Customs Officers employed in the district.

Radio Messages. Permission can be sent to ships to enter the district through Port Radar. Arrangements have been made with the Mersey Docks and Harbour Board for wireless messages from vessels to be transmitted through Port Radar to the Port Health Authority. Pilots are equipped with portable radio.

The number of ships visited by the Assistant Port Medical Officers during the year was 768, of which 588 were from infected ports; of the vessels boarded in the river 61 were bound for Manchester.

MOORING STATIONS.

Outer Mooring Station. That part of the River Mersey known as the Sloyne has been designated as the outer mooring station. Any berth within the docks may be designated by the Medical Officer as an inner mooring station.

ARRANGEMENTS FOR HOSPITAL ACCOMMODATION, SURVEILLANCE, CLEANSING AND DISINFECTION.

Infectious diseases other than smallpox are accommodated by the Regional Hospital Board in the Liverpool hospitals for infectious diseases.

Surveillance. Whenever necessary information is sent to medical officers of health concerning the following up of contacts of infectious disease.

Disinfection. Disinfection of ships is done by the officers of the Port Health Authority. During the year, 127 disinfections after infectious disease were carried out. In each case beds and bedding were removed for steam disinfection.

Cleansing. Cleansing and disinfection of persons and clothing are carried out at the Liverpool Corporation disinfecting stations.

Section VII.

INFECTIOUS DISEASE.

No cases of smallpox, plague, cholera, yellow fever, typhus or relapsing fever were landed at Liverpool during the year.

SMALLPOX.

Cases of smallpox are sent to the Port Health Hospital, New Ferry, Cheshire.

Transport for such cases is provided by the Liverpool City Ambulance Authority.

Consultants available are:—

Professor Andrew B. Semple, Medical Officer of Health.

Dr. E. R. Peirce, Senior Assistant Port Medical Officer.

Facilities for laboratory diagnosis are available at the Liverpool University School of Hygiene.

VENEREAL DISEASE.

Special pamphlets giving the location, days and hours of the available facilities for treatment of venereal disease are distributed to ships by officers of the Port Health Authority.

There were 37 cases of venereal disease reported aboard 27 vessels arriving in the port during the year. These were referred, where circumstances required, for treatment at the Seamen's Dispensary.

Section IX. CASES OF NOTIFIABLE AND OTHER INFECTIOUS DISEASES IN SHIPS.

Table D.

The number of cases of infectious disease *landed from vessels* arriving in the Port of Liverpool and those occurring in Liverpool-bound ships which were disposed of *prior to the arrival of the vessels* at the port, are shown on the following tables.

Cases of infectious sickness landed from vessels.

Diseases.	No. of Cases during Year.		No. of vessels concerned.
	Passengers.	Crew.	
Plague	—	—	—
Cholera	—	—	—
Yellow Fever	—	—	—
Smallpox	—	—	—
Typhus Fever	—	—	—
Scarlet Fever	—	—	—
Enteric Fever	—	12	5
Diphtheria	—	5	5
Measles and German Measles	9	1	7
Chickenpox	10	4	9
Tuberculosis	39	11	25
Pneumonia	3	5	5
Dysentery	1	9	5
Malaria	2	12	9
Mumps	5	3	4
Poliomyelitis	2	—	2
Whooping Cough	—	1	1
	71	63	77

Cases of Infectious sickness occurring in vessels during the voyage but disposed of prior to arrival.

Diseases.	No. of Cases during Year.		No. of Vessels concerned.
	Passengers.	Crew.	
Plague	—	—	—
Cholera	—	—	—
Yellow Fever	—	1	1
Smallpox	—	—	—
Typhus Fever	—	—	—
Scarlet Fever	1	—	1
Enteric Fever	—	7	4
Diphtheria	—	1	1
Measles and German Measles	14	—	11
Chickenpox	12	9	11
Tuberculosis	2	1	3
Pneumonia	5	3	7
Malaria	11	23	18
Mumps	9	1	7
Poliomyelitis	2	1	3
Dysentery	3	10	7
Erysipelas	—	1	1
Whooping Cough	1	—	1
	60	58	76

Cases landed from other ships (coastwise vessels).

Diseases.	No. of Cases during Year.		No. of Vessels concerned.
	Passengers.	Crews.	
Tuberculosis	19	—	15
Pneumonia	—	1	1
Scarlet Fever	—	1	1
Diphtheria	—	1	1
	19	3	18

Section X. MALARIA.

During the year 48 cases of malarial fever in 27 ships were notified, which were either landed in Liverpool or had recovered abroad.

ANTHRAX.

Two cases were reported during the year. The first patient was a dock labourer who had been engaged for a day-and-a-half sorting hides at a discharging berth. He was diagnosed as anthrax on 17.3.54 and removed to Fazakerley Hospital for treatment.

The second patient, seen on the same day, was also engaged on hides, and had worked at the above berth from 11.3.54 to 15.3.54.

No precautions had been taken against anthrax at the discharging berth. Hot water, soap, and gloves were not available.

No further cases were reported.

Section XI. MEASURES TAKEN AGAINST SHIPS INFECTED WITH OR SUSPECTED FOR PLAGUE.

No rodent plague was discovered either in ships or ashore. Four suspected rats proved on examination to be negative.

MEASURES AGAINST RODENTS ON SHORE.

The measures taken against rodents have been continued during the year, as described in previous reports.

PREVENTION OF DAMAGE BY PESTS ACT, 1949.

(Prevention of Damage by Pests (Application to Shipping) Order, 1951).

131 Rodent Control Certificates were issued during the year.

At Liverpool the following procedure is adopted:—

1. A notice is served on the ship master or officer in charge instructing him to make application to the Port Health Authority for the inspection of the vessel. The owners or agents state when the vessel will be completely discharged and available for inspection.

2. After arranging the date and time for inspection, a port health inspector, accompanied by a rodent operative searcher, visits and searches the vessel for evidence of rats. The various compartments are measured up and a record kept of the cubic capacities of all coastal vessels examined.

3. If no evidence of rats or mice is found, particulars of the inspection are duly recorded and a certificate issued by the medical officer.

4. If evidence of rats or mice is found, the shipowners or agents are informed and instructions given to fumigate, or to set poison baits.

5. All fumigations are supervised by the Port Health Authority and, after the process is completed, vessels are searched for dead rats by a rodent operative.

Section XII. MEASURES AGAINST RODENTS IN SHIPS FROM FOREIGN PORTS.

The measures taken against rodents in ships have been continued during the year on the same lines as were shown in the Annual Report for 1952.

During 1954, 336 rats and 241 mice, recovered from ships, were submitted to the City Bacteriologist for examination.

Arrangements in the district for deratting ships, the methods used, and if done by a commercial contractor, the name of the contractor.

Agents or owners of ships found to be heavily infested with rats are, in their own interest, advised to take appropriate action even if the ship holds a valid international deratting certificate or rodent control certificate.

Most of the larger shipping companies employ rat catchers under private contract, while the smaller shipping companies and shipping agents employ rat catching firms as required.

DERATTING IN SHIPS.

(*a*) Routine trapping by port health rat catchers.

(*b*) Trapping and/or poisoning by rat catchers employed by the shipping companies.

(*c*) Fumigation with hydro-cyanic acid gas or sulphur dioxide.

PRINCIPAL CONTRACTORS.

The principal contractors carrying out rat catching and fumigations in the port, approved by the Port Health Authority, in alphabetical order are:—

(*a*) *Rat Catching.*

Associated Fumigators (Northern) Ltd.
Messrs. T. & F. Borrows.
Deodor-X Hygiene Services Ltd.
Hivey Fumigation Co.
Irlam Insecticides.
B. Strode.

(*b*) *Fumigators.*

Associated Fumigators (Northern) Ltd.
Deodor-X Hygiene Services Ltd.
Fumigation Services Ltd.
Hivey Fumigation Co.

When temporary or permanent harbourage is discovered in ships, the masters and the owners (or agents) are informed and advised how to eliminate it; every effort is made to see that the vessels are made reasonably rat-proof before a deratting or deratting exemption certificate is issued. During the year, 111 fumigations were carried out for the purpose of obtaining deratting certificates, and 517 vessels were granted deratting exemption certificates, making a total of 628 examinations.

The extent of rodent infection in foreign-going vessels.

(1) *The ratio of deratting certificates issued to deratting exemption certificates:—*

During the years 1949-1953, the number of deratting and deratting exemption certificates issued were:—

Year	Exemption.	Deratting (Fumigation)
1949	519 = 74%	178 = 26%
1950	520 = 78%	147 = 22%
1951	546 = 79%	149 = 21%
1952	512 = 77%	155 = 23%
1953	571 = 80%	142 = 20%

Included in the totals of deratting certificates are a number which were carried out at the request of the shipowners, although no evidence of rat infestation was found at the examination. In 1949, 55 such certificates were issued, in 1950—54, in 1951—60, in 1952—32, and in 1953—36.

Year.	Exemptions.	Rat-free ships fumigated at owners request.	Rat-infested ships fumigated
1949	519	+ 55 = 574 (82%)	123—18%
1950	520	+ 54 = 574 (86%)	93—14%
1951	546	+ 60 = 606 (87%)	89—13%
1952	512	+ 32 = 544 (82%)	123—18%
1953	571	+ 36 = 607 (85%)	106—15%

The reasons for these requests are:—

(1) The vessel may be calling at a foreign port where the Authorities refuse to accept an exemption certificate, although it is valid, or

(2) The owners may wish to fumigate the vessel for cockroaches or bugs, in which latter case a much higher concentration of gas is used than for deratting.

Records based on the above findings show that 84 per cent of foreign-going vessels using the Port of Liverpool are rat-free.

(2) *The degree of infestation in foreign-going vessels.*

The degree of infestation in foreign-going vessels is not great. In 1929, the first full year International Deratting Certificates were issued in the port, 335 ships were examined with an average of 7·8 rats and 0·87 mice per vessel.

In 1937, 649 ships were examined with an average of 2·29 rats and 0·21 mice per vessel, and in 1953, 713 ships were examined with an average of 1·44 rats and 1·06 mice per vessel.

(3) *Development of methods of rat destruction.*

There are three methods of rat destruction used in ships; trapping, poisoning and fumigation.

(*a*) Trapping is usually carried out with rat cages and breakback traps. Trapping is particularly useful in dealing with small infestations of rats and mice, or to clear residual rat populations in conjunction with poisoning. It has the advantage of being safe and can be used by almost anybody after very little training, both at sea and in port, and during loading and discharge of cargo. Trapping can also be used on quite a large scale when other methods are not practicable: it is used extensively in the routine work of plague detection, to obtain specimens for bacteriological examination. Although the method is not new, it still plays a valuable part in rodent control in ships.

(*b*) Poisoning has developed more in recent years than any other method of rat extermination. In the past, private firms of rat catchers used their so-called "secret poisons", and proprietary brands of rat poison were in general use. Later the Ministry of Agriculture and Fisheries recommended the use of zinc phosphide and arsenious oxide. These recommended methods of poisoning, which involved pre-baiting, were not widely used in ships, which are often in port for only a short time, and are seldom empty for long. Recently, Warfarin and 1080 (sodium fluoroacetate) have been widely used in ships with considerable success. Warfarin is safe and effective but takes time, which is a very important consideration. "1080" is a quick and effective poison but is dangerous to handle.

No poison can guarantee that the entire rat population will be killed; deratting certificates are therefore not issued in this port for poisoning.

(c) Fumigation in ships is carried out with SO_2 (burning sulphur), or with HCN (hydro-cyanic acid gas).

A fairly recent development has been the use of methyl bromide as a fumigant, but this gas is not used in Liverpool for deratting ships. Sulphur is now only seldom used, practically all fumigations being carried out with HCN. HCN is quick and effective, and when properly used it is reasonably certain that all the rodents will be destroyed; it is a dangerous gas which must only be handled by skilled personnel, and the ship's crew cannot be allowed to remain aboard while fumigation is taking place.

The fumigation of ships with HCN is now governed by the Hydrogen Cyanide (Fumigation of Ships) Regulations, 1951. The gas may be used in an absorbed form using kieselguhr, gypsum, soft wood pulp or absorbent discs in sealed gas-tight tins of varying sizes, opened with a patent opener, and distributed as required; or, a commoner method is that the liquid is contained in large cylinders and sprayed under pressure into the space to be fumigated. Sometimes a combination of both these methods is employed. At present, fumigation with HCN constitutes the most speedy effective, and certain method of rodent destruction in ships.

(4) *Progress in rat-proofing of ships.*

In new ships more attention is being shown to rat-proofing. Owners and builders appear to realise the advantages of a ship which is structurally rat-proof. Occasionally in new ships rat-proofing is neglected, but there is usually little difficulty in getting the necessary alterations made. Temporary harbourage consisting of badly stowed ship's gear, matting, dunnage, etc., is very often encountered and corrected.

INSPECTION OF DOCK PREMISES.

The following defects and nuisances were dealt with on dock premises:—

Description of Premises	Defective or Inadequate					Structural Defects	Rat Harbourage	Rat Infestation	Accumulated Refuse	Noxious Effluvia	Dirty Conditions	Verminous Conditions	Damp Conditions	Water Supply	Miscellaneous
	Lighting	Heating	Ventilation	W.C. Accommodation	Drainage										
Dock Sheds	—	—	—	—	—	—	28	7	17	—	2	1	—	—	—
Canteens ...	—	—	—	3	12	—	9	13	5	—	10	3	1	1	12
Factories ...	—	—	—	—	—	1	6	6	4	1	3	1	—	—	—
Quays ...	—	—	—	—	—	—	3	2	37	—	—	—	—	1	1
Roadways ...	—	—	—	—	—	—	1	1	47	—	—	—	—	—	—
Railway Premises ...	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Warehouses	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—
Mills ...	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Latrines ...	—	—	—	3	1	—	—	—	—	—	—	—	—	1	—
Lairages ...	—	—	—	—	—	—	1	1	1	—	—	—	—	—	—
Airport Premises...	—	—	—	—	—	—	1	1	2	—	—	—	—	—	—
Total ...	—	—	—	7	13	1	50	32	113	2	15	5	1	3	13

The restoration of sheds and buildings damaged by enemy action, and modernisation of dock latrines is still proceeding.

Number and species of rats caught, in the Port of Liverpool during the year 1954.

1955	Ships		Quays		Other Sources		Total		Examined		Destroyed		Total Caught
	Black	Brown	Black	Brown	Black	Brown	Black	Brown	Black.	Brown.	Black.	Brown.	
January ...	177	—	38	6	96	29	311	35	147	33	164	2	346
February ...	77	—	36	5	96	62	209	67	125	43	84	24	276
March	62	—	22	7	105	75	189	82	114	33	75	49	271
April	83	—	43	5	69	26	195	31	116	21	79	10	226
May	115	—	48	10	67	31	230	41	149	41	81	—	271
June	241	—	53	26	66	25	360	51	134	48	226	3	411
July	120	—	53	17	57	22	230	39	109	37	121	2	269
August ...	87	—	24	20	51	42	162	62	77	43	85	19	224
September ...	65	—	32	7	69	45	166	52	113	41	53	11	218
October ...	169	—	43	9	107	51	319	60	153	34	166	26	379
November ...	117	—	15	11	67	32	199	43	104	38	95	5	242
December ...	80	—	28	8	59	7	167	15	79	10	88	5	182
TOTAL ...	1,393	—	435	131	909	447	2,737	578	1,420	422	1,317	156	3,315

Table E.—Rats Destroyed.

Rodents destroyed during the year 1954 in ships from foreign ports.

Category	Number
Black Rats	1,393
Brown Rats	—
Species not known	—
Sent for examination	336
Infected with plague	—

Rodents destroyed during the year 1954 in Docks, Quays, Wharves and Warehouses.

Category	Number
Black Rats	1,344
Brown Rats	578
Species not known	—
Sent for examination	1,506
Infected with plague	—

Number of Mice destroyed in vessels	819
Number of Mice destroyed on quays	627
Number of Mice examined from vessels and quays	809

The combined returns of all rats and mice caught and destroyed by shipping firms employing their own rat-catchers, by rat catching companies, and by the Port Health Authority, during the year 1954, are as follows:—

	Rats	Mice
PORT—		
In vessels	1,696	827
On quays	1,922	627
	3,618	1,454

N.B.—In addition to the above, 2,628 rats were caught and destroyed by the Dock Board ratcatcher during the year.

Number of Visits to **Vessels** by Rat Catchers	7,513
Number of Visits to **Vessels** by Rat Searchers	6,901
Number of Visits to **Quays, Sheds, etc.,** by Inspectors ...	3,074
Number of Visits to **Quays, Sheds, etc.,** by Rat Searchers	3,349
Number of Visits to **Quays, Sheds, etc.,** by Rat Catchers	20,177

Measures of Rat Destruction in Plague-"Infected" or "Suspected" vessels or in vessels from Plague-Infected Ports during the year 1954.

Total Vessels Arriving	No. Fumigated with SO_2	No. of Rodents Killed	No. Fumigated with HCN	No. of Rodents Killed	No. Fumigated with both HCN & SO_2	No. of Rats Killed	No. of such vessels in which Trapping, etc., was employed	No. of Rodents Killed	No. of such vessels in which measures of Rat Destruction were not carried out
588*	1	8 mice	37	284 rats 322 mice	—	—	497	98 rats 110 mice	26

* Including 61 vessels bound for Manchester.

Table F.—Deratting Certificates Issued.

Deratting Certificates and Deratting Exemption Certificates issued during the year 1954.

Number of Deratting Certificates issued after Fumigation with			After Trapping, Poisoning, etc.	TOTAL	No. of Deratting Exemption Certificates issued	Total Certificates issued
H.C.N.	Sulphur	H.C.N. and Sulphur				
104	7	—	—	111	517	628

Section XIII. INSPECTION OF SHIPS FOR NUISANCES.

During the year careful attention has been paid to the inspection of ships for nuisances.

The improvement in crew accommodation in new British foreign-going and coastal vessels, mentioned in previous reports, has been maintained.

Dust Nuisance—Bidston Dock.

A ship arrived at Alfred Dock, Birkenhead, on 25.10.54 from Saffi, North Africa, and was visited by a port health inspector the same day. The vessel later proceeded to Bidston Dock where cargo discharge of a very dusty type of yellow iron ore was commenced.

Following a report of a nuisance arising from this dusty cargo, a visit was made to Bidston Dock, and it was observed that despite canvas screens which had been erected, a considerable amount of dust was blown away during discharge when the ore was released from the holding hoppers on the quay into railway trucks. Also, when over-loaded trucks were brought back and unloaded, dust was seen to be blown away from the grab.

On the 2nd November the chief port health inspector interviewed the manager in charge of discharging operations, and discussed this nuisance with him, and suggested that if the screens were lowered the nuisance might be minimised. The manager welcomed the suggestions made, and stated that this ship was originally destined for Manchester, and his firm would not, if at all possible, accept another ship carrying this poor-grade dusty ore. The ship sailed on 4th November.

It was observed that another ship lying astern, was discharging Swedish ore, and no dust nuisance existed.

After the ship sailed, discussions took place with the manager and engineer concerned with discharging operations, and following experiments with screening and water sprays a considerable improvement was noted.

The stevedores also received complaints concerning the noise which takes place while discharging ore, and they have taken every precaution to reduce this nuisance.

Inspection of Shipping.

Year 1954.

Nationality	Visits	Re-Visits	Total
British...	3,937	474	4,411
Dutch ...	521	2	523
Norwegian	196	16	212
Swedish	173	5	178
American	161	9	170
German	143	5	148
Danish	104	9	113
Panamanian	67	31	98
Spanish	66	9	75
Italian	40	20	60
Finnish	32	—	32
Greek ...	31	12	43
Liberian	26	11	37
Egyptian	22	1	23
Belgian	21	—	21
Russian	20	1	21
Portuguese	12	4	16
Brazilian	12	—	12
Argentinian	11	2	13
Chilian	10	—	10
Costa Rican	9	3	12
Swiss ...	8	—	8
Israeli ...	5	2	7
Turkish	4	4	8
Yugo-Slavian	3	—	3
French	2	2	4
Icelandic	2	—	2
Japanese	2	—	2
Syrian	2	—	2
TOTAL	5,642	622	6,264

Table G.—Inspections and Notices.

Nature and Number of Inspections		Notices Served		Result of Serving Notices	
		Statutory	Other Notices		
NATURE OF INSPECTION					Nuisances
Dirty Crew Quarters	—	None	721	679	Remedied
Verminous Quarters	—	"	5,102	4,703	"
Dirty Washhouses or W.C.'s. ...	—	"	73	57	"
Foul Water Tanks	—	"	2	2	"
Foul Bilges	—	"	—	—	"
Foul or Choked W.C's.	—	"	33	20	"
Accumulations of offensive refuse ...	—	"	29	28	"
Gear stowed in Crews quarters ...	—	"	1	1	"
Damp Quarters	—	"	19	15	"
Leaky Deckheads	—	"	24	21	"
Defective Heating System	—	"	27	24	"
Defective Bulkheads...	—	"	—	—	"
Defective Portlights, Skylights, etc.	—	"	31	20	"
Defective or Inadequate Ventilation	—	"	3	1	"
Defective Deck Covering	—	"	12	8	"
Defective Lockers	—	"	—	—	"
Defective Chain or Hawse Pipes ...	—	"	—	—	"
Rat Harbourage	—	"	7	7	"
Defective W.C. Fittings	—	"	31	25	"
Defective Soil Pipes	—	"	—	—	"
Defective Waste Pipes or Scuppers	—	"	16	15	"
Defective Washing Facilities ...	—	"	13	4	"
Inadequate Lighting...	—	"	—	—	"
Inadequate Drainage	—	"	—	—	"
W.C's. discharging on Quay... ...	—	"	8	3	"
Miscellaneous	—	"	36	30	"
NUMBER OF INSPECTIONS	5,642	—	—	—	
TOTAL	5,642	—	6,188	5,663	

Summary of Insanitary Conditions during the year 1954.

Class of Vessels	Number Inspected	Number in which Nuisances were found	Per cent.
SAILING FOREIGN—			
Steamers	2,883	372	12·9
Motor	2,367	165	6·97
Sailing	—	—	—
Total	5,250	537	10·228
SAILING COASTWISE—			
Steamers	256	11	4·3
Motor	136	—	—
Sailing	—	—	—
Total ...	392	11	2·81

Nationality	Number Inspected.	Number in which Nuisances were found
British	3,937	437
Foreign	1,705	111
Total	5,642	548

Nuisances found in Vessels.

Defects of Original Construction (*a*)	Per cent. of Total Defects	Structural Defects through wear and tear (*b*)	Per cent. of Total Defects	Dirt, and other conditions prejudicial to health (*c*)	Per cent. of Total Defects
57	0·921	151	2·44	5,980	96·639

Section XIV.

PUBLIC HEALTH (SHELLFISH) REGULATIONS, 1934, 1948.

The prescribed area in the Order made by the Liverpool Port Health Authority, March 1951, means the "Customs Port of Liverpool" and is as defined in the Annual Report for 1951.

No prosecutions were instituted during the year.

No applications were received to approve cleansing apparatus or establishments.

DANGEROUS DRUGS.

During the year, 101 certificates authorising the purchase of scheduled dangerous drugs were issued under the Dangerous Drugs (No. 3 Regulation), 1923, amending the Dangerous Drugs Regulations, 1921, regulation 15 of which is as follows:—

> "If a foreign ship in any port in Great Britain requires to "obtain a supply of any of the drugs in order to complete the "necessary equipment of the ship, the Master of the ship is autho-"rised to purchase and be in possession of such quantity of any of "the drugs as may be certified by the Medical Officer of Health of "the Port where the ship is (or in his absence by the Assistant "Medical Officer of Health of the Port) to be necessary for the "purpose, the quantity not to exceed what is required for the use of "the ship until it reaches its home port. The certificate given by "the Medical Officer or Assistant Medical Officer of Health of the "Port shall be marked by the supplier with the date of the supply "and shall be retained by him and kept for inspection."

MEDICAL INSPECTION OF ALIENS.

The following table gives the total number of aliens arriving in the Port of Liverpool during 1954, and the number of each of the categories under which alien passengers are classified by the Immigration Department of the Home Office:—

Visitors	Business Visitors	Others	Total
6,969	88	2,168	9,225

Total number of vessels carrying Alien passengers ...	1,021
Number of vessels dealt with by the Medical Inspector ...	250
Number of aircraft dealt with by the Medical Inspector	18

Medical Inspection of Aliens. Year 1954.

	TOTAL.	Number Inspected by the Medical Inspector.	Number subjected to detailed examination by the Medical Inspector.	CERTIFICATES ISSUED					
				Lunatic Idiot or M.D.	Undesirable for medical reasons.	Physically incapacitated.	Suffering from acute infectious disease.	Landing necessary for adequate medical examination.	Transmigrants.
(*a*) Total number of Aliens landing at the Port ...	9,225	8,619	286	—	—	—	—	—	—
(*b*) Aliens refused permission to land by Immigration Officer	165	—	—	—	—	—	—	—	—
(*c*) Transmigrants	—	—	—	—	—	—	—	—	—
Total Aliens arriving at the Port	9,390	8,619	286	—	—	—	—	—	—

FOOD INSPECTION.

Throughout the year the inspection of foods has been carried out in accordance with the various Regulations governing imported food.

Public Health (Imported Food) Regulations, 1937/48.

Article 10 states that "No prohibited meat shall be imported into England or Wales for sale for human consumption, and no meat or meat product shall be so imported without an official certificate".

Several infringements of the above Regulations have been dealt with as follows:—

Australia.

Two consignments of edible tallow, totalling 101 drums and not bearing any official certificates, were landed and detained. A covering bulk veterinary certificate issued by the Department of Commerce and Agriculture of Australia was produced by the importer and the goods were released.

One shipment of 12 casks of edible beef stearine without the official certificates attached was released for inedible uses only.

The attention of the Government Trade Commissioner for Australia in London was drawn to the badly marked and sometimes illegible stamping of official certificates on casks of edible tallows.

New Zealand.

Three shipments, totalling 86 casks of edible tallow without any official certificates, were landed, detained, and later released on the production by the importers of covering bulk veterinary certificates issued by the Department of Agriculture of New Zealand.

Three shipments of edible tallow, totalling 96 casks, without any official certificates, were released for inedible purposes only.

Cyprus.

One cask of salted sheep casings, without any official certificate, was landed, detained and later released on production by the importer of a veterinary certificate issued by the Municipality of Limasol.

Iceland.

Two consignments consisting of 20 barrels of salted sheep casings, without any official certificates attached, were landed, detained and subsequently released on the production of covering bulk veterinary certificates issued by the Chief Veterinarian for Iceland. The attention of the Icelandic Consul was drawn to these importations and to the requirements of the Regulations.

Italy.

Eight boxes of salami sausages were landed without the official certificate, detained and later released on the production of a certificate issued by the Italian Republican Veterinary Services.

Uruguay.

Four consignments of edible tallow, totalling 2,775 casks, incorrectly certificated, were landed and detained. Covering bulk veterinary certificates issued by the Ministry of Livestock and Agriculture in Uruguay were produced and the consignments released.

Germany.

One consignment of 80 drums of edible premier jus, not bearing any official certificate, was landed, detained and later released on the production of a covering bulk veterinary certificate issued by the State Veterinary Department at Essen.

Onchocerciasis.

Bags of boneless brisket beef from Australia continue to arrive; each consignment is detained on landing and sent to local cold stores pending a detailed examination after partially defrosting the meat. The incidence of onchocerciasis was as high as 31 per cent in one consignment. These consignments all bear the recognised official certificate.

A consignment consisting of 559 cartons of frozen boneless briskets, each carton containing approximately 112 lbs. of meat packed en bloc, was fully examined after being partially defrosted and found to be about 50 per cent decomposing.

Chilled Beef.

Chilled beef from Australia and Argentina arrived in good condition.

Fresh Beef.

One consignment consisting of 100 quarters of fresh beef, was landed at Speke Airport from Dublin, in good condition and was handled in a satisfactory manner.

Caseous Lymphadenitis.

The incidence of caseous lymphadenitis did not exceed 5 per cent in any one consignment of mutton carcases examined during the year.

Nuts in Shell.

Consignments of cokernuts from West Africa continue to arrive in an unsatisfactory condition. One consignment of 186 bags (1,800 Nuts) was completely unsound and destroyed. A consignment of 700 bags of walnuts from India was found to be grossly infested with maggots (cocoons and larvae), and was subjected to fumigation. On further examination, when it was established that the infestation was internal, the whole 700 bags were destroyed.

Canned Foods.

Canned tomatoes from Italy have arrived in large quantities. Some consignments, including many blown and burst tins, have had to be fully examined, one such was found to contain 18·7 per cent blown and burst tins.

A consignment of canned pork luncheon meat from Portugal was fully examined and found to include 16·2 per cent blown and burst tins.

588 cartons of canned peaches from United States of America had been subjected to excessive heat in the ship during the voyage to this country, causing many of the tins to blow and burst. The contents of a further number of tins (which externally appeared quite normal) were found on opening to have broken down; they were also discoloured and showed signs of metallic contamination. A total of 312 cartons (each 24 tins) was destroyed.

A consignment consisting of 28,000 cartons of canned salmon from Canada was landed and during examination it was noticed that some tins were perforated and pitted at the point where the label was joined, and only in cartons code marked "E". The cartons with code mark "E" were segregated and further examinations and enquiries were made. It was established that the perforations and pitting were due to some oxidising agent used in the manufacture of the gum for sticking the labels on the cans. All the cartons code marked "E" were fully examined. At the request of the Ministry of Food the consignment was allowed to be distributed to various destinations where the local medical officer of health had consented to supervise the examination.

A consignment of 400 cartons of canned mandarin oranges from Japan was fully examined and the equivalent of 181 cartons found to be blown and burst.

Public Health (Preservatives, Etc., in Food) Regulations, 1925/53.

Samples of citrus fruits have been submitted to the City Analyst and examined for the presence of "diphenyl", as they had been wrapped in diphenyl treated papers. No excessive amount of diphenyl has been reported.

Samples of oranges from Spain were found to contain "thiourea" (from a trace to 25 parts per million), and seven consignments, totalling 2,469 cases, were exported.

Samples of dehydrated vegetables from France have been submitted for analysis and found to be free from prohibited preservatives and metallic contamination.

One consignment of 1,548 cartons of sultanas from United States of America had been stowed in close proximity to powdered borax in the ship. It was detained on landing and samples were submitted to the City Analyst who reported 1,150 parts per million of boric acid present (sultanas may contain up to 200 parts per million naturally). The fruit was subjected to a very careful reconditioning process, during which further samples were submitted to the City Analyst. The portion passed for human consumption contained as little as 50 parts per million of boric acid; the balance of 6,600 lbs. (equal to about 220 cartons) was destroyed.

Cleanliness in the Handling of Foodstuffs.

In the interest of cleanliness and hygiene in the handling, transport and storage of foods at the docks, the inspectors are continually making suggestions and requests for improvements. Suggestions for improving the cleanliness of railway and road transport vans have been made to the authorities. Improvement has been noted in the type of slings used in the discharge of refrigerated meat cargoes from the ships; these are now mostly all metal, which, as they are non-absorbent, do not become wet and dirty during bad weather.

Master porters engaged in the handling of dried fruit cargoes are often called upon to weigh and tare a portion of each consignment, and have co-operated by making benches and trays to contain the fruit above floor level during these operations.

UNSOUND SUGAR.

1,192 tons 16 cwt. 1 qr. 6 lbs. of unsound sugar (loose-collected, sweepings, etc.) was dealt with during the year, and suitably disposed of to local Refiners for reconditioning.

Table showing the quantity and description of unsound meats utilised under supervision* during the year 1954:—

DESCRIPTION.	TOTAL WEIGHT				CAUSE OF DESTRUCTION											
					Tuberculous.				Brine stained, mouldy and decomposed.				Other causes.			
	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.
Beef	16	9	3	22	—	—	—	—	15	11	0	14	—	18	3	8
Mutton	2	19	1	4	—	—	—	—	2	16	2	17	—	2	2	15
Pork	77	17	2	0	—	—	—	—	77	16	3	14	—	—	2	14
Veal	—	1	2	24	—	—	—	—	—	1	2	24	—	—	—	—
Total	97	8	1	22	—	—	—	—	96	6	1	13	1	2	0	9

*These were destroyed or allowed to go for industrial purposes to the satisfaction of the Medical Officer.

Table showing the total quantities of the different unsound foodstuffs utilised under supervision during the year 1954:—

	Tons	Cwts.	Qrs.	Lbs.
Beef, Mutton, Pork and Veal	97	8	1	22
Offal (Beef, Mutton, etc.)	1	18	1	16
Canned Goods	94	7	0	5
Fruit and Vegetables	3,436	12	3	13
Cereals	596	4	0	23
General (Fish, Poultry, Rabbits, etc.) ...	49	12	2	4
TOTAL	4,276	3	1	27

The following tables give the particulars of samples sent to the City Analyst and City Bacteriologist for examination during the year 1954:—

CITY ANALYST.

Apples	12
Beef Tongue	1
Canned Salmon	3
Canned Sardines	1
Canned Tomatoes	1
Dehydrated Onion Slices	1
Dehydrated Onion Strips	1
Lemons	2
Oranges	23
Pears	3
Sultanas	5

CITY BACTERIOLOGIST.

Blood	2
Canned Salmon	3
Faeces	19
Urine	4
Water	98

In addition, 324 samples of goat hair, buffalo hair, black drawn bristle hair and wool were submitted for examination.

The Port Health Authority is also engaged in the issue of certificates of disinfection for foreign governments and other purposes in connection with the exportation of hides, wool, jute sacks and cloth, tailors' cuttings, rags, second-hand bags and clothing, bales of cotton, etc.

The department also endorses under the United States, Canadian and other regulations, certificates regarding wholesomeness of food articles, and the sanitary condition of the premises in which the articles are produced or stored, comprising poultry, game, cheese, bacon, hams, potatoes, preserved fish, pickled beef, tongues, sausage skins, lime juice, etc.

The work attached to preparing and recording these certificates is considerable, and takes up a large amount of time of the department.

I desire to express my appreciation of the valuable assistance received from H.M. Collector of Customs and staff, the Mersey Docks and Harbour Board and their officers, and the various shipping companies who have co-operated with the Port Health Authority in the maintenance of Public Health and the prevention of disease in the port. The Consular Bodies have at all times given courteous assistance.

ANDREW B. SEMPLE,
Medical Officer of Health,
Liverpool Port Health Authority.